

Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Previously Presented) A metal-coated substrate, having a metal layer provided on one side or both sides of a laminated plastic film having a plurality of plastic film layers, the laminated plastic film comprising:

a plastic film layer as at least a base body;

a joining interface; and

a thermoplastic film layer including thermoplastic,

wherein the joining interface is between the metal layer and the thermoplastic film layer, the difference between linear expansion coefficients of the plastic film layer and the metal layer is $15 \times 10^{-6}/K$ or less, when a temperature of the plastic film layer is decreased from 200°C to 20°C at a 5°C/min, at least one or more kind of element selected from Si, Ti, and Al are contained in an organic substance from the joining interface toward the metal layer, and the metal layer is formed on the thermoplastic film layer by a vapor deposition method.

2. (Previously Presented) The metal-coated substrate according to claim 1, wherein a glass transition temperature of the thermoplastic contained in the thermoplastic film layer is 180°C or more.

3. (Previously Presented) The metal-coated substrate according to claim 1, wherein the metal layer is formed, with a temperature of the laminated plastic film controlled at the temperature from the temperature lower than the glass transition temperature of the thermoplastic film by 100°C to lower than a decomposition temperature of the thermoplastic film.

4. (Canceled)

5. (Previously Presented) The metal-coated substrate according to claim 1, wherein the vapor deposition method is a sputtering method or an ion plating method.
6. (Previously Presented) The metal-coated substrate according to claim 1, wherein a pulling elasticity modulus of the laminated plastic film layer is 1000MPa or more.
7. (Previously Presented) The metal-coated substrate according to claim 1, wherein the metal layer is further laminated by a plating method on the metal layer formed by the vapor deposition method.
8. (Currently Amended) A manufacturing method of a metal-coated substrate, which is the manufacturing method of the metal-coated substrate having a metal layer provided on one side or both sides of a laminated plastic film having a plurality of plastic film layers, comprising:
- selecting a plastic film layer as a base body of which a difference between linear expansion coefficients and the metal layer provided on the laminated plastic film is $15 \times 10^{-6}/K$ or less, when a temperature of the plastic film layer is decreased from 200°C to 20°C at a 5°C/min;
- forming a thermoplastic film containing thermoplastic on one side or both sides of the plastic film layer as a base body; and thereafter
- forming the metal layer on the thermoplastic film layer by a vapor deposition method, wherein before the metal layer is formed, an organic substance containing at least ~~one~~ one or more kind of element selected from Si, Ti, and Al is deposited directly on the thermoplastic film layer.
9. (Original) The manufacturing method of the metal-coated substrate according to claim 8, wherein when the metal layer is formed, a temperature of the laminated plastic film layer is controlled at the temperature from the temperature lower than the glass transition

temperature of the thermoplastic film by 100°C to lower than a decomposition temperature of the thermoplastic film.

10. (Canceled)

11. (Currently Amended) The manufacturing method of the metal-coated substrate according to ~~claim 10~~claim 9, comprising the steps of:

allowing the organic substance containing at least one or more kind of elements selected from Si, Ti, and Al to be deposited on the thermoplastic film layer before the metal layer is formed; and

heat-treating at 150°C or more the laminated plastic film having the organic substance containing at least one or more kind of elements selected from the Si, Ti, and Al deposited thereon.

12. (Previously Presented) The manufacturing method of the metal-coated substrate according to claim 11, comprising the steps of:

allowing the organic substance containing at least one or more kind of elements selected from Si, Ti, and Al to be deposited on the thermoplastic film layer before the metal layer is formed; and

heat-treating at 150°C the laminated plastic film having the organic substance containing at least one or more kind of elements selected from the Si, Ti, and Al deposited thereon,

wherein the above two steps are simultaneously performed.

13. (Previously Presented) The manufacturing method of the metal-coated substrate according to claim 8, wherein as a vapor deposition method for forming the metal layer, a sputtering method or an ion plating method is performed.

14. (Previously Presented) The manufacturing method of the metal-coated substrate according to claim 8, comprising:

a plating film-forming step by a plating method for laminating the same kind or different kind of metal layer on the metal layer formed by the vapor deposition method.

15. (Previously Presented) The manufacturing method of the metal-coated substrate according to claim 14, further comprising forming a predetermined circuit pattern.

16. (Previously Presented) The manufacturing method of the metal-coated substrate according to claim 14, comprising the steps of:

forming a predetermined circuit pattern by providing a resist film on the metal layer formed by the vapor deposition method;

laminating the same or different kind of metal layer by a plating method on the metal layer having the circuit pattern formed thereon; and

removing the resist film, and removing the metal layer under the resist film thus removed,

wherein a predetermined circuit pattern is formed on the metal layer.